

REPUBLIC OF ZAMBIA METEOROLOGICAL DEPARTMENT

PROCEEDINGS

OF THE

RANET PROJECT

INAUGURAL NATIONAL WORKSHOP

MULUNGUSHI INTERNATIONAL CONFERENCE CENTRE LUSAKA, 22 SEPTEMBER 2000

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22 SEPTEMBER 2000

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PROCEEDINGS OF THE RANET PROJECT INAUGURAL NATIONAL WORKSHOP,

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I. OPENING OF THE WORKSHOP

The workshop was opened by the Deputy Permanent Secretary in the Ministry of Communications and Transport, on behalf of the Minister.

In his welcoming remarks, Mr. Z. Mumba, Acting Deputy Director, Meteorological Department, expressed his pleasure in welcoming, The Deputy Permanent Secretary in the Ministry of Communications and Transport, for finding time to come and officiate on behalf of The Minister, and also welcomed all the other participants to the one day **Ranet** workshop. The Acting Deputy Director pointed out that the RANET National workshop, had brought together experts from various Government and Non-Governmental organisations like Meteorology, Agriculture, Mass Communications to mention but a few. He further recognised the presence of Provincial representatives, emerging farmers and those from Multilateral institutions like World Food Programmes (WFP), (FEWS), and NGOs like PAM, SNV as well as those from Government Agencies.

He said that what brought all those present at the workshop was the desire to serve the people of Zambia better in the area of Information provision and dissemination.

The participants were informed that RANET project originated at the Africa Centre of Meteorological applications for Development (ACMAD), based in Niamey, Republic of NIGER.

The project has the support of the National Oceanic and Atmospheric Administration, NOAA of the USA. The project arose out of an identified need for information of various kinds amongst rural communities in Africa, and that it was intended to cover all countries of Africa and Zambia was one of the first few countries to implement it.

The project will involve amongst other activities, the distribution of wind-up and solar powered radios to rural communities where the ability of batteries can be a constraint to access information disseminated through radios. Although the project was originally conceived to facilitate the dissemination of meteorological information, people in Zambia realised that Meteorological information may not necessarily be a priority need amongst the community, especially in the rural areas .It was for that reason that various stakeholders and information providers were invited, so that together they could identify what type of information can be provided to the people, in what priorities and the best strategies to meet the demand.

The workshop was therefore a consultative process, which should guide on how best to achieve the objectives. Needless to say that the recipients of information must themselves, determine what information they want to receive as well as themselves contribute to the information generation. He further informed the participants that the workshop was only the beginning of what the Meteorological Department believes should be a continuous consultative process, between the information providers and the target communities. The participants were also informed that the resource persons for the workshop came from the Meteorological Department as well as some invited from outside the Department. However, it was stressed

that more discussions than formal presentations were expected during the workshop.

Before inviting the Deputy Permanent Secretary in the ministry of Communications and Transport to deliver the Minister's speech, the Ag Deputy Director of Meteorological Department informed the participants that, funding for the workshop was provided by ACMAD, the Ministry of Communication and Transport and some of our partners such as the World Food Programme, to all of whom he expressed gratitude.

II. OPENING ADDRESS BY THE DEPUTY PERMANENT SECRETARY, MINISTRY OF COMMUNICATIONS AND TRANSPORT

In delivering the Minister's speech, the Deputy Permanent Secretary expressed happiness to officiate at the one day RANET workshop, and urged all the participants to fully participate in the deliberations. He went on to state that Meteorology had a very important role to play in the economic development of any nation, and that this role could easily be seen in Aviation and Maritime Transport, Agriculture, Construction and Tourism just to mention a few. He further informed participants that climate and weather related issues have in recent years, captured the attention of Governments, Groups of Countries such as SADC, COMESA Grouping in this region and indeed the rest of the International and local communities. At all these levels the promotion had been largely prompted and driven by adverse conditions such as drought and floods. He further observed that these two phenomena, which represented the manifestations of extremes of weather and climate, almost always brought about very heavy economic losses, and human suffering. He then reminded the participants about the 1999/2000 season which brought havoc to Mozambique and other neighbouring countries, where cyclones, namely "ELINE" and "GLORIA" caused heavy flooding, which made many people including animals homeless.

Here at home the participants were reminded of climate fluctuations, which have been recorded through variations in agriculture output and water resources.

The Deputy Permanent Secretary, emphasised on the need for effectively communicating to end users, scientific information such as seasonal rainfall forecasts, the ten - day forecasts and the daily weather forecasts which would help in reducing risks of catastrophe. He implored the participants to dwell more on how to disseminate information to rural communities for use in their developmental efforts. At this point, the guest of honour, paid glowing tribute to ACMAD and its bilateral partners for the assistance rendered, to the Zambia Meteorological Department in increasing its capacity to communicate climate forecasts and other developmental information to the rural communities in Zambia; using radio and Internet "RANET" in short. He observed that the use of local languages in the RANET community broadcasts, will also ensure better understanding of all warning about impending weather disasters..

The participants were also reminded about the expected benefits to Zambia arising from an increased agriculture output due to the direct link between the Meteorological Department and the farming community. He also noted that the project would also enhance research and development in Zambia.

In his closing remarks, the Deputy Permanent Secretary thanked the Director General of ACMAD and the World Meteorological Organisation for all the support rendered to Zambia in launching the RANET PROJECT.

III. INTRODUCTION TO RANET

By

Lt Col D. Ng'ambi Meteorological Department

1. INTRODUCTION

After explaining the objectives of RANET project, the speaker tabulated all the problems which the peasant farmers and the rural communities were facing in Zambia. He said that the Zambian Economy which was heavily dependent on proceeds from copper production, was gradually being transformed into a rain fed Agriculture economy. Seventy to Eighty percent of the population that was engaged in agriculture production is in the rural settings of the country. The women contributed the biggest percentage in this production. The rural community in Zambia is disadvantaged, as they lack developed infrastructure of communication facilities and thus lose out, on vital information for rural development. He said that as Zambia depended on rain - fed agriculture; information on rainfall onset, amount and length of seasonal rains and cessation were very vital for planning agriculture operations. Rural farmers need this information, but due to poor communication, such information rarely reaches the farmers. This has jeopardised the rural agriculture operations leading to situation of disaster like flooding, famine, disease, loss of animals and thus disrupting the economic development. Such calamities could be better managed if the rural communities had access to such vital meteorological information.

The speaker informed the participants that the RANET broadcasting project was intended to reach rural communities in isolated areas, poor and have no or less access to information, and that it was very important for the communities to involve women, in the project. He explained that the workshop was to initially form up a multi - disciplinary team, to include the following specialists: Meteorologists, Environmentalists, Ecologists, Agronomists, Social Scientists, Public Health workers, Veterinary Officers, Communicators and policy makers.

He further clarified that the workshop was to discuss the need for information products. Once this need was established, the workshop was to identify training need at various levels, identify areas where the radio broadcasting stations were to be set and identify local resources available. The workshop was also informed that they were to develop a specific programme for the production and distribution of products, as well as establish co-ordination and evaluation process of the project.

2. TRAINING:

The participants were reminded about training of Meteorological personnel and agricultural extension agents in the use of the new technologies and the interpretation of climate forecasts for them to advise the rural farmers on the utilisation of rainfall forecasts for proper management of agricultural operations. The participants were also reminded about the need for training of meteorologists and Hydrologists to improve

on the quality of products like rainfall forecasts. Emphasis was made for the need to train rural radio broadcasters and community members on the management and use of information.

3. SUPPORT NEEDED FROM ACMAD AND OTHER PARTNERS

The speaker informed the participants that in order for the RANET project to run smoothly the following equipment would be needed:

- a. 2x Computers dedicated to the work of RANET.
- b. Equipment and software that is necessary for the production of geographical information systems products and for downloading data using digital radios.
- c. 4x Radio Broadcasting stations (for the start-up phase).
- d. Solar/wind up radios to be distributed to selected communities.
- e. 2x Four-wheel drive motor vehicles to be used by members of the National consortium team involved in the implementation monitoring and evaluation of the project.

4. LOCAL RESOURCES NEEDED

- a. Office accommodation at the Meteorological Headquarters and at all the four beneficiary sites identified.
- b. Fax and E-mail services at the meteorological headquarters.
- c. Local teams to run the radio stations.
- d. Local mechanism for sustainability of the project.

IV. RANET IMPLEMENTATION PROGRAMME

By Zilore Mumba

Meteorological Department

1. RANET DELIVERABLES

Empower Rural Communities with Timely Information

✓ Seasonal Forecasts ✓ Health Warnings

✓ Weather warnings

* Agricultural

* Community

Environment

Extension (including veterinary)General Interest (e.g. personal call

✓ Marketing messages)

2. INFORMATION CHARACTERISTICS

Constraints Strategies

May be perishable Timely delivery

Global in nature, local in application correct interpretation+downscaling

Limited access Digital radio+internet and rural radio

Cost effective delivery wind-up and solar power

3. RANET INTERVENTIONS

Distribute wind-up and solar powered radios

Assist in setting up Rural Community Radio stations (licensing regulations permitting)

Involve existing community radios (Icengelo, Phoenix, etc.) in community information dissemination

Train manpower in Internet, mass communication/interpretation (to run rural/community radios stations)

Source support for community radios stations / Promote community ownership

4. CURRENT RANET SCHEDULE

Global/Regional/National/Local information is up-linked to satellite

Compiled information sent by internet to up-link station in South Africa

Top of every hour information up-dated on satellite

Broadcast can be downloaded by digital radio (faster than internet)

Broadcast content used by local community and received on wind-up radio

http://www.cip.ogp.noaa.gov/rcp/a/index.html

5. NATIONAL IMPLEMENTATION PROPOSAL

Form multi-disciplinary team, to;

distribute radios

develop content

set up community radios/involve existing radios

source any support required for the project

V. EQUIPMENT DEMONSTRATION

By Zilore Mumba

Meteorological Department

All the available equipment was effectively demonstrated to all the participants. The equipment included the following three models of wind-up/solar powered radio models and one Hitachi digital radios. These are shown below:



VI. RADIO COMMUNICATIONS LICENSING

RANET NATIONAL WORKSHOP Lusaka, 22 September 2000

Presented By

Elias Chileshe

Assistant Controller Communications Authority of Zambia

1. INTRODUCTON

- The radio frequency spectrum is a limited natural resource to be used economically and efficiently.
- Internationally, the regulated spectrum ranges from 9KHz to 400 GHz
- The spectrum is managed through application of natural and International regulations

2. INTERNATIONAL RADIO REGULATIONS

- Provides for the allocation of spectrum to services e.g.
- Broadcasting Services
- Aeronautical Radio Navigation
- Meteorological Aids
- Fixed and Land Mobile
- States that: 'No transmitting station may be established or operated by a private person or by any enterprise without a license issued in an appropriate form and in conformity with the provisions of these Regulations by or on behalf of the government of the country to which the station in question is subject'.

3. NATIONAL REGULATONS

- The telecommunications Act, Cap 469 of the laws of Zambia
- The Radio Communications Act, Cap 169
- The Zambia National Broadcasting Corporation Act, Cap 154

4. THE TELECOMMUNICATIONS ACT

Created the Communications Authority whose functions include;

- Regulation the provision of telecom service
- Licensing of telecom operators [PSTN, Cellular, Internet etc]
- Create competition in the sector
- Attract investment
- Protect the interest of consumers

5. THE RADIO COMMUNICATIONS ACT

- Provides for the management of the radio frequency spectrum by the CAZ thru;
- Assignment of radio frequencies and call-signs to users
- Detections and resolution of radio interference
- Prosecutions of offenders

6. THE ZNBC ACT

- Created the Zambia National Broadcasting Corporation
- Provides for the licensing of private sound and television station
- Provides for the general management (in consultation with the CAZ) frequencies allocated the broadcasting service.

7. HOW TO OBTAIN A LICENSE

i) TELECOMMUNICATION LICENCE

- Purchase application form from CAZ
- Submit application form indicating service to be provided
- Wait for evaluation of application
- Pay appropriate fee [if application is approved]
- Commerce service provision

ii) RADIO LICENCE

- Obtain application for from CAZ
- Submit application form indicating of stations etc
- Pay radio licence fee [if application is approved]
- When licence issued, purchase equipment and install

Commence transmissions

iii) BROADCASTING LICENCE

- Purchase application form for a construction **permit from** Ministry of Information and Broadcasting services
- When construction permit is issued, commence construction
- When construction is complete, request for inspection of station
- If construction is satisfactory, full
- Broadcasting licence is issued
- Commence transmission as per type of station e.g.
- Television Station
- Radio Broadcasting Station e.g. FM, SW, MF or LW

8. CONCLUDING NOTE

Possession of radio communication apparatus of all description without a permit is unlawful

VII. EDUCATION BROADCASTING PILOT PROJECT FOR THE OUT OF SCHOOL YOUTHS

By

Mrs. Mubashi

Educational Broadcasting Services

This year, Educational Broadcasting services has been involved in producing programs for a non-formal school set up. It has been producing programmes for the out of school youths. This came up after the needs assessment which confirmed that there was an over whelming need for Educational Services for Orphans, many who are AIDS Orphans.

Educational Broadcasting Services has implemented a twenty (20) week pilot project in nine major compounds of Lusaka and one rural area in Chongwe.

Educational Broadcasting Services has two fully equipped radio studios. It was funded by NORAD and the Ministry of Education. The communities have provided centres where the children meet. They have also provided radio sets, black boards, mentors and their allowances.

When the project started, the target number of children was one thousand five hundred (1,500) children is now more than double. More centres have opened even in places like Monze they get their broadcasts through radio Chikuni.

It is hope of the Educational Broadcasting, that after the Pilot phase, the radio programmes will cover all the parts of the country.

The programmes are of high quality but minimal cost as compared to those that were produced earlier on.

Programmes are produced using the Interactive Radio Instructions methodology. A high level of learners' activity is stimulated by the radio. There is direct response by the learners and the mentors to the radio. Sometimes, it is between the mentor and the learner. At times amongst the learners themselves.

Locally gathered materials are used during the programmes. Pupils and the mentor assemble the kit as they go by. Things like sticks, stones, bottle tops and match boxes are used as learning or teaching materials.

Mentors were trained in managing centre, handling of children and following the instructions from the radio and mentor's guide.

Educational programmes using interactive radio instructions, are broadcast daily Monday and Friday. Radio two is used to transmit the programmes at 10:15 hours and at 14:15 hours. The programmes are 30 minutes long. In each programme English language Mathematics, writing, reading and life skill are covered. One hundred (100) programmes will be produced by the end of the pilot project.

To cover all the parts of the country, EBS would like to work in partnership with other departments, community groups, churches and local NGOs'.

VIII. OPEN DISCUSSION

During the open discussions the issue of identifying the initial sites was thoroughly discussed and agreed upon, subject to physical inspections. The sites which were agreed upon and are to be inspected are: -

a. Petuake - about 300km East of Lusaka

b. Mkushi - about 210km N/E of Lusakac. Misamfu - about 600km North of Lusaka

d. Choma - about 230km South West of Lusaka

1. RESOLUTIONS

- A. It was resolved that the National consortium team shall comprise of mine members, to cover all the disciplines involved in the production of the identified products.
- B. It was resolved that ACMAD be informed on the formation of the National consortium on team, subject to confirmation by various heads of department.
- C. It was also resolved that the initial four sites should be physically inspected by the National consortium team whose terms of reference should also be clearly spelt out.

The workshop was closed at 1845 by the acting Deputy Director of the Zambia Meteorological Department.

2. MEDIA COVERAGE

The workshop attracted wide media coverage from both the electronic and print media. Many interviews were solicited and granted to both private and state owned radio stations, by the organisers as well as peasants farmers who attended the workshop. Extracts of newspaper print outs are reproduced as appendix C to this report.

IX. APPENDIX A: LIST OF PARTICIPANTS

1. Mr. Z. Mumba	Ag. Deputy Director DEPARTMENT OF METEOROLOGY (LUSAKA)
2. MR. J. Nkomoki	DEPARTMENT OF METEOROLOGY (LUSAKA)
3. MR. R Mumbi (Retired)	"
4. MR. L.N. Makwetula	""
5. LT. COL. D. Ngambi	""
6. MR. A.T. Muwaya	"
7. MR G.M. Muloshi	""
8. MR O.A. Mwangase	DEPARTMENT OF METEOROLOGY (NDOLA)
9. MR .H.C. Nsakanya	WORLD VISION INTERNATIONAL
10. MR C. Mushinge	FEWS NET
11. MRS C. Chipulilo	PEASANT FARMER (MKUSHI)
12. MRS M. Halwindi	PEASANT FARMER (CHIBOMBO)
13. MRS M.A. Sitwala	MINISTRY OF AGRICULTURE
14. MRS DM. Phiri	""
15. MRS J.M. Mabuchi	MINISTRY OF EDUCATION (Broadcasting Unit)
16. MR. F.C. Jere	MINISTRY OF AGRICULTURE (NAIS)
17. MR L. Simbeye	MINISTRY OF AGRICULTURE (NDOLA)
18. MR. F. K. Makai	DEPT OF METEOROLOGY (N/W PROV)
19. MRS L. Shayoya	(SOUTHERN PROV)
20. MR .C. F. Ngwira	(CENTRAL PROVINCE)

21. MR .H. M. Mulemwa	(LUAPULA PROV)			
22. MR. M. M. Mukelabai	(WESTERN PROVINCE)			
23. MR .H. Hamukali	MINISTRY OF AGRICULTURE (WESTERN PROV)			
24. MR C. Nkatiko	(NP/SP)			
25. MS .E. M. Mweetwa	(CENTRAL PROV)			
26. MRE. M. C. Chuma	(N/WESTERN PROV)			
27. MR .E. Chileshe	COMMUNICATIONS AUTHORITY (LUSAKA)			
28. S. R. Kasonde	RADIO YASTANI (CATHOLIC)			
29. MR .E. Milambo.	RADIO CHIKUNI (CATHOLIC			
30. MR .J.H. Mulengu PEASANT FARMER (CHOMA)				
31. MRS .N.P. Chimese	RADIO ICHENGELO (CATHOLIC			
32. MRS .V. Shipanuka	RADIO PHOENIX (PRIVATE COMMUNITY RADIO)			
33. MR.S. Chisenga	ZAMBIA NEWS AGENCY (ZANA)			
34. MR .J. Ngoma	ZAMBIA DAILY MAIL			
35. MR.P. Kabwe	FOOD RESERVE AGENCY			
36. MRS .F.Mwewa	PEASANT FARMER (EASTERN PROVINCE)			

X. ANNEX B: PROGRAMME

Opening Ceremony

- Welcome speech by (Mr. .Z. .Mumba)
- Opening Speech by the Deputy Permanent Secretary

Break

SESSION 1; Chairman; J. Nkomoki

- Introduction to RANET LT.COL .D. Ng'ambi
- Implementation of RANET in Zambia Z. .Mumba
- Equipment demonstration Z. .Mumba
- Procedures of radio licensing E. Chileshe
- Role of Education Broadcasting Mubashi (Mrs)

Lunch Break

- Formation of committees and reports
- Open discussions
- Plenary session
- Resolutions
- Conclusion and closing remarks

XI. APPENDIX C:

MEDIA CLIPS

Zambia Daily Mail | Saturday, September 23. 2000

Weather forecasts vital to farmers, stresses Luo

By MUKULA MUKULA COMMUNICATIONS and Transport Minister, Professor Nkandu Luo, has said scientific information on seasonal rainfall was important because it helped avert impending disasters like droughts.

At the official opening of a seminar on Radio and Internet for Development (RANET) yesterday, the minister said farmers in remote parts of the country needed such information for them to increase agriculture



LUO...Weather forecasts vital to farmers.

output. The minister was speaking in a speech read for her by the ministry's deputy permanent secretary, Emmanuel Chileshe at Mulungushi International Conference Centre.

The RANET project to be coordinated by the Meteorological Department is to provide information to the rural communities on weather, health and hygiene education.

This will be done through the distribution of windup and solar powered radios to farmers and rural communities.

THE POST, Friday September 22, 2000

Rural areas to get improved weather report

By Chama Nsabika

THE meteorological department is working to improve infrastructure for delivering climate information and weather forecast to rural areas through the use of digital radios capable of accessing internet signal.

According to the director of meteorology Gilbert Chipeta, the radios would be operating on long-wave band and the internet signal would receive data in rural settlements which would later be re-transmitted in local languages within 40-60 kilometres radius.

"The rural communities in Zambia are disadvantaged as they lack developed infrastructure for communication and thus are not able to utilise vital information generated and disseminated for rural development," Chipeta observed.

The broadcasting project, known as Radio and Internet (RANET) to be launched today is intended to utilise simple technology with cost free easy-to-use wind-up radios and the radio stations would operate on solar panels, a renewable energy source.

Chipeta said the overall objective of the project was to enhance living standards of rural dwellers by increasing their access to vital climatic, health, agricultural, environmental and other information needed to improve their well-being.